

WHAT IS CLAIMED IS:

1. Isolated nucleic acid having at least 80% nucleic acid sequence identity to a nucleotide sequence that encodes an amino acid sequence selected from the group consisting of the amino acid sequence shown in Figure 2 (SEQ ID NO:2), Figure 4 (SEQ ID NO:7), Figure 6 (SEQ ID NO:9), Figure 8 (SEQ ID NO:11), Figure 10 (SEQ ID NO:16), Figure 12 (SEQ ID NO:18), Figure 14 (SEQ ID NO:20), Figure 16 (SEQ ID NO:22), and Figure 18 (SEQ ID NO:24).

5  
2. Isolated nucleic acid having at least 80% nucleic acid sequence identity to a nucleotide sequence selected from the group consisting of the nucleotide sequence shown in Figure 1 (SEQ ID NO:1), Figure 3 (SEQ ID NO:6), Figure 5 (SEQ ID NO:8), Figure 7 (SEQ ID NO:10), Figure 9 (SEQ ID NO:15), Figure 11 (SEQ ID NO:17), Figure 13 (SEQ ID NO:19), Figure 15 (SEQ ID NO:21) and Figure 17 (SEQ ID NO:23).

10  
15  
3. Isolated nucleic acid having at least 80% nucleic acid sequence identity to a nucleotide sequence selected from the group consisting of the full-length coding sequence of the nucleotide sequence shown in Figure 1 (SEQ ID NO:1), Figure 3 (SEQ ID NO:6), Figure 5 (SEQ ID NO:8), Figure 7 (SEQ ID NO:10), Figure 9 (SEQ ID NO:15), Figure 11 (SEQ ID NO:17), Figure 13 (SEQ ID NO:19), Figure 15 (SEQ ID NO:21) and Figure 17 (SEQ ID NO:23).

20  
4. Isolated nucleic acid having at least 80% nucleic acid sequence identity to the full-length coding sequence of the DNA deposited under ATCC accession number 203538, 203661, 203583, 203657, 203576, 203573, 203553, 203651 and 203537.

5. A vector comprising the nucleic acid of any one of Claims 1 to 4.

25  
6. The vector of Claim 5 operably linked to control sequences recognized by a host cell transformed with the vector.

7. A host cell comprising the vector of Claim 5.

8. The host cell of Claim 7, wherein said cell is a CHO cell.

30

9. The host cell of Claim 7, wherein said cell is an *E. coli*.

10. The host cell of Claim 7, wherein said cell is a yeast cell.

35  
11. A process for producing a PRO polypeptides comprising culturing the host cell of Claim 7 under conditions suitable for expression of said PRO polypeptide and recovering said PRO polypeptide from the cell culture.

12. An isolated polypeptide having at least 80% amino acid sequence identity to an amino acid sequence selected from the group consisting of the amino acid sequence shown in Figure 2 (SEQ ID NO:2), Figure 4 (SEQ ID NO:7), Figure 6 (SEQ ID NO:9), Figure 8 (SEQ ID NO:11), Figure 10 (SEQ ID NO:16), Figure 12 (SEQ ID NO:18), Figure 14 (SEQ ID NO:20), Figure 16 (SEQ ID NO:22), and Figure 18 (SEQ ID NO:24).

5

13. An isolated polypeptide scoring at least 80% positives when compared to an amino acid sequence selected from the group consisting of the amino acid sequence shown in Figure 2 (SEQ ID NO:2), Figure 4 (SEQ ID NO:7), Figure 6 (SEQ ID NO:9), Figure 8 (SEQ ID NO:11), Figure 10 (SEQ ID NO:16), Figure 12 (SEQ ID NO:18), Figure 14 (SEQ ID NO:20), Figure 16 (SEQ ID NO:22), and Figure 18 (SEQ ID NO:24).

10

14. An isolated polypeptide having at least 80% amino acid sequence identity to an amino acid sequence encoded by the full-length coding sequence of the DNA deposited under ATCC accession number 203538, 203661, 203583, 203657, 203576, 203573, 203553, 203651 and 203537.

15

15. A chimeric molecule comprising a polypeptide according to any one of Claims 12 to 14 fused to a heterologous amino acid sequence.

20

16. The chimeric molecule of Claim 15, wherein said heterologous amino acid sequence is an epitope tag sequence.

25

17. The chimeric molecule of Claim 15, wherein said heterologous amino acid sequence is a Fc region of an immunoglobulin.

18. An antibody which specifically binds to a polypeptide according to any one of Claims 12 to 14.

19. The antibody of Claim 18, wherein said antibody is a monoclonal antibody, a humanized antibody or a single-chain antibody.

30

20. Isolated nucleic acid having at least 80% nucleic acid sequence identity to:

(a) a nucleotide sequence encoding the polypeptide shown in Figure 2 (SEQ ID NO:2), Figure 4 (SEQ ID NO:7), Figure 6 (SEQ ID NO:9), Figure 8 (SEQ ID NO:11), Figure 10 (SEQ ID NO:16), Figure 12 (SEQ ID NO:18), Figure 14 (SEQ ID NO:20), Figure 16 (SEQ ID NO:22), or Figure 18 (SEQ ID NO:24), lacking its associated signal peptide;

35

(b) a nucleotide sequence encoding an extracellular domain of the polypeptide shown in Figure 2 (SEQ ID NO:2), Figure 4 (SEQ ID NO:7), Figure 6 (SEQ ID NO:9), Figure 8 (SEQ ID NO:11), Figure 10 (SEQ ID NO:16), Figure 12 (SEQ ID NO:18), Figure 14 (SEQ ID NO:20), Figure 16 (SEQ ID NO:22), or

Figure 18 (SEQ ID NO:24), with its associated signal peptide; or

(c) a nucleotide sequence encoding an extracellular domain of the polypeptide shown in Figure 2 (SEQ ID NO:2), Figure 4 (SEQ ID NO:7), Figure 6 (SEQ ID NO:9), Figure 8 (SEQ ID NO:11), Figure 10 (SEQ ID NO:16), Figure 12 (SEQ ID NO:18), Figure 14 (SEQ ID NO:20), Figure 16 (SEQ ID NO:22), or Figure 18 (SEQ ID NO:24), lacking its associated signal peptide.

5

21. An isolated polypeptide having at least 80% amino acid sequence identity to:

(a) the polypeptide shown in Figure 2 (SEQ ID NO:2), Figure 4 (SEQ ID NO:7), Figure 6 (SEQ ID NO:9), Figure 8 (SEQ ID NO:11), Figure 10 (SEQ ID NO:16), Figure 12 (SEQ ID NO:18), Figure 14 (SEQ ID NO:20), Figure 16 (SEQ ID NO:22), or Figure 18 (SEQ ID NO:24), lacking its associated signal peptide;

10 (b) an extracellular domain of the polypeptide shown in Figure 2 (SEQ ID NO:2), Figure 4 (SEQ ID NO:7), Figure 6 (SEQ ID NO:9), Figure 8 (SEQ ID NO:11), Figure 10 (SEQ ID NO:16), Figure 12 (SEQ ID NO:18), Figure 14 (SEQ ID NO:20), Figure 16 (SEQ ID NO:22), or Figure 18 (SEQ ID NO:24), with its associated signal peptide; or

15 (c) an extracellular domain of the polypeptide shown in Figure 2 (SEQ ID NO:2), Figure 4 (SEQ ID NO:7), Figure 6 (SEQ ID NO:9), Figure 8 (SEQ ID NO:11), Figure 10 (SEQ ID NO:16), Figure 12 (SEQ ID NO:18), Figure 14 (SEQ ID NO:20), Figure 16 (SEQ ID NO:22), or Figure 18 (SEQ ID NO:24), lacking its associated signal peptide.